

REMARKS

Claims 1, 3, 5-6, 11, 25, 27, 29, 31, and 33 are currently amended to correct minor informalities and also to conform to the claim language of their respective parent claims from which claims 3, 5-6, 11, 25, 27, 29, 31, and 33 depend. Claim 1 is further amended to clarify the invention. A complete listing of the current pending claims is provided below. No new matter has been added. Applicants respectfully request the Examiner to enter the amended claims even though the Application is currently subject to a final rejection as these claims are currently amended only to correct clerical errors but not for substantive purposes.

I. CLAIM OBJECTIONS

Claim 31 stands objected to due to informalities. Claim 31 is currently amended to correct the informality and is believed to have overcome the objection.

II. CLAIM REJECTIONS UNDER 35 U.S.C. § 101

Claims 1, 3-7, 9-12, 25, 27, 31, and 33 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Applicants first respectfully submit that the Board of Patent Appeals and Interferences held in Ex parte Bilski that “*machine-implemented methods inherently act on and transform physical subject matter, such as objects or electrical signals, and nominally fall within the definition of a ‘process’ under § 101.*” Here, claim 1 specifically discloses how to prevent a resource consumer from starting a new activity and how another resource consumer, which is already executing, is allowed to continue its activity on the computer system. Applicants respectfully submit that preventing and starting any entities requiring use of a system resource constitutes a step in an machine-implemented method which inherently transforms electrical signals and thus fall squarely within the holding of Bilski.

Applicants further respectfully submit that the method of claim 1 not only implicitly but also inherently and invariably requires the transformation of electric signals from one state to another as happens in a computer and thus, even if the Office Action’s suggestion that

“software” were to be a recognized judicial exceptions of patentable subject matter, the method of claim 1 nonetheless satisfies the practical application by producing some physical transformation as the method falls squarely within the negative implication of the holding of Ex parte Bilski. See Ex parte Bilski at p.42.

Moreover, Applicants respectfully submit that claim 1 does not fall within the three 35 U.S.C. § 101 judicial exceptions of unpatentable subject matter of natural phenomena, abstract idea, or laws of nature and that “software” has not been recognized as such as the Office Action suggests. Instead, claim 1 discloses a method for quiescing resource consumer activity in a computer. MPEP 2106 further indicates that “[t]he conclusion that a particular claim includes a 35 U.S.C. § 101 judicial exception does not end the inquiry because the practical application of a judicial exception may qualify for patent protection.” That is, the “practical application” analysis of applies only when a particular application has been found to fall within the 35 U.S.C. § 101 judicial exceptions. Since no judicial opinions have ever held that “software patent applications” constitute a judicially recognized exception to the 35 U.S.C. § 101 patentable subject matters, Applicants respectfully submit that the § 101 rejection is improper as against the United States Supreme Court’s holding in Diamond v. Chakrabarty that “anything under the sun that is made by men” may constitute patentable subject matter and the Federal Circuit’s holding in State Street Bank & Trust Co. v. Signature Fin. Group Inc. that the so-called business method exception to statutory subject matter is ill conceived and has been put to rest. See State Street, 149 F.3d at 1375, 47 USPQ2d at 1602.

Additionally, the Office Action provides on p.3 that “the claimed subject matter provides for allowing a second resource consumer of a second group to continue an already-running activity on the computer system . . . and, thus, fails to achieve the required status of having real world value.” That is, the Office Action lifts one element of claim 1 and concludes that claim 1 does not have real world value because this particular element does not have real world value. Whether or not this particular claimed element has real world values, Applicants respectfully submit that “the claim must be considered as a whole . . .” MPEP 2106. As such, Applicants

further submit that the basis for § 101 rejection of claim 1 is, again, improper. Claim 1 is currently amended to clarify the present invention.

As such, Applicants respectfully submit that claim 1 claims patentable subject matter and the 35 U.S.C. § 101 rejection is thus improper. Claims 3-7, 9-12, 25, 27, 31, and 33 either depend directly or indirectly from claim 1 or recite similar limitations. Thus, Applicants respectfully submit that the § 101 rejections of these claims are also improper.

III. CLAIM REJECTIONS UNDER 35 U.S.C. § 112

Claims 3, 5-7, 11, 25, 27, 31, and 33 stand rejected under 35 U.S.C § 112, second paragraph.

A. The Office Action cites to language of claim 3 of “a first/second group of resource consumer”. Claim 3 does not contain such a claim element of “first/second group”. However, claim 3 has been currently amended to correct a minor clerical error by changing “second group” to “third group”. Claim 11 represent the computer program product claim reciting similar limitations and is thus similarly amended to correct the same clerical error. Thus, claims 3 and 11 are believed to have overcome the rejections under 35 U.S.C. § 112, second paragraph.

Claim 5 does not recite any second group. Applicants respectfully request the Examiner to particular point out which part of claim 5 stands rejected under 35 U.S.C. § 112, second paragraph. However, claim 5 has been currently amended to correct a minor clerical error and is thus believed to have overcome the rejections under 35 U.S.C. § 112, second paragraph. .

Claim 6 has been currently amended to correct a minor clerical mistake by changing “second group” to “fourth group” and is thus believed to have overcome the rejections under 35 U.S.C. § 112, second paragraph. .

B. Claims 25, 27, 29, 31, and 33 are also currently amended to conform with the language of claims 1, 9, and 17 from which claims 25, 27, 29, 31, and 33 respectively depend and are thus believed to have overcome the rejections under 35 U.S.C. § 112, second paragraph.

IV. CLAIM REJECTIONS UNDER 35 U.S.C. § 102(e)

Claims 1, 3, 5-6, 8, 9, 11, 13-14, 25, 27, and 31-34 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,430,619 filed on May 6, 1999 and issued on Aug. 6, 2002 to Sitaraman et al. (Sitaraman). Applicants respectfully traverse.

Applicants first respectfully submit that Sitaraman is not a prior art within 35 U.S.C. § 102(e) because the current application is a continuation in part of another patent application, now patented under U.S. Patent No. 6,341,303 ('303 patent), and is entitled to the filing date of the above parent application because the subject matter of claim 1 is disclosed in the manner provided by 35 U.S.C. § 112, first paragraph, in the parent application.

Applicants further point to the original disclosure which provides support for the claimed limitations. In each of the subsections below, citations are provided from both the 6,341,303 patent ('303 patent) and the Specification of the 09/141,644 application (Specification) filed on Aug. 6, 2002

A. As to claims 1 and 9:

(a) Support from the original disclosure of the parent disclosure for the claimed limitations of *"preventing a first resource consumer of a first group from starting a new activity on the computer system based upon a resource plan, in which the resource plan comprises a limit on a maximum number of active sessions for the first group"* of claim 1.

"first resource consumer": please refer to **col. 3, ll. 3-6** in the '303 patent where it is disclosed that "[r]esource requesters in the present embodiment include processes, jobs, and other entities operating within a computer system and requiring use of a system resource." Also see **p. 5, ll. 8-10** in the Specification.

"first group": please refer to **col. 3, ll. 23-24** in the '303 patent where "requesters are grouped into classes . . ." and therefore it is inherent that there be a first group of requesters. Also see **p. 5, ll. 23-24** in the Specification.

“preventing . . . from starting a new activity”: please refer to **col. 10, ll. 38-48** in the ‘303 patent where it is disclosed that a virtual thread is created when a new requester first requests processor time and that these runnable requesters are either awake or asleep and to **col. 12, l. 3** where the sleeping requester must be awakened. Thus, the requesters which first request for processor time but are put to sleep are prevented from starting a new activity. Also see **p. 19, l. 21 – p. 20, l. 2** in the Specification.

“resource plan”: please refer to **col. 8, ll. 46-48** in the ‘303 patent where a scheduling or allocation plan is disclosed, **col. 9, ll. 13-17** in the ‘303 patent where it is disclosed that different plan allocates processor time according to a different policy, and the *Scheduling Plans* section in **col. 7, l. 56 – col. 10, l. 29** in general. Also see **p. 22, l. 21 – p. 23, l. 4** in the Specification.

“limit on maximum number of active sessions”: please refer to **col. 10, ll. 43-48** in the ‘303 patent where it is disclosed that “[a] limited number of runnable requesters are kept awake” and **col. 3, ll. 3-6** where “[r]esource requesters in the present embodiment include processes, jobs, and other entities operating within a computer system and requiring use of a system resource.” The term “other entities operating within a computer system and requiring use of a system resource” incorporates sessions. Also see **p. 19, l. 21 – p. 20, l. 2** and **p. 5, ll. 8-10** in the Specification.

(b). Support from the original disclosure of the parent disclosure for the claimed limitations of *“allowing a second resource consumer of a second group to continue an already-running activity on the computer system.”*

“second resource consumer”: please refer to **Fig. 7** and **col. 11, l. 55 – col. 12, l. 2** in the ‘303 patent where it is disclosed that requester 210 constitute a different requester and thus the second resource consumer. Also see **p. 22, ll. 4 – 15** in the Specification.

“second group”: please refer to **Fig. 7** and **col. 12, ll. 19-28** in the ‘303 patent where it is disclosed that the requesters belong to different classes, and thus it is inherent that there be a second group of requesters. Also see **p. 23, ll. 2 – 8** in the Specification.

“already-running activity”: please refer to **Fig. 7** and **col. 11, ll. 39-45** in the ‘303 patent where requester 210 is already running, and the scheduler 200 receives a query from requester 210 to ask whether it (requester 210) should continue executing. Also see **p. 21, ll. 19 – 23** in the Specification.

“allowing . . . to continue an . . . activity on the computer system”: please refer to **Fig. 7** and **col. 11, l. 46 – col. 12, l. 28** in the ‘303 patent where the scheduler determines whether requester 210 may continue executing based on some criteria. Under certain conditions, requester 210 is allowed to continue to execute on the system. Also see **p. 21, l. 19 – p. 23, l. 8** in the Specification.

(c). Based on the above evidentiary support from the original Specification as filed on Aug. 6, 2002, Applicants respectfully submit that all the claimed limitations of claim 1 is properly supported by Specification of the parent application, 09/141,664 in compliance with 35 U.S.C. § 112, first paragraph. As such, claim 1 is entitled to the benefit of the filing date of the parent application. Thus, Sitaraman constitutes an improper prior art reference under 35 U.S.C. § 102(e) so the rejections are therefore improper.

B. As to claim 3:

Support from the original disclosure of the parent disclosure for the claimed limitations of *“wherein the first resource consumer belongs to a first group of resource consumers, further comprising a second group of resource consumers, wherein the first group of resource consumers is prevented from starting new activity while the second group of resource consumers is allowed to start new activity”* of claim 3.

As to the claimed limitations of ***“first resource consumer”***, ***“first group”***, ***“preventing . . . from starting a new activity”***, ***“second resource consumer”***, and ***“second group”***, please see the evidentiary support in subsection A.

“allowed to start new activity”: please refer to please refer to **col. 10, ll. 38-48** in the ‘303 patent where it is disclosed that a virtual thread is created when a new requester first

requests processor time and that these runnable requesters are either awake or asleep and to **col. 11, ll. 60-63** of the '303 patent where the parent application discloses that in certain situations, there is no need to stop executing requester 210. Therefore, it is inherent that at least in these situations certain groups of resource consumers will be allowed to start new activities.

5-6, 8, 9, 11, 13-14, 25, 27, and 31-34

C. As to claims 5 and 13:

Support from the original disclosure of the parent disclosure for the claimed limitations of *“configuring the first configurable value to a quiescence value, the quiescence value being adapted to limit the number of newly active sessions for the first resource consumer group to zero, wherein all currently active sessions are allowed to continue, but no new sessions are allowed to become active.”*

“configuring . . .”: please refer to **col. 4, ll. 8-11, and ll. 47-51, col. 7, ll. 2-6, ll. 11-14, ll. 57-65 and col. 10, ll. 43-48** of the '303 patent.

“quiescence value being adapted to limit the number of newly active sessions for the first resource consumer group”: please refer to **col. 10, ll. 43-48**.

“all currently active sessions are allowed to continue, but no new sessions are allowed to become active”: please refer to **Fig. 4 and col. 9, ll. 29-39** of the '303 patent where the parent discloses different allocation of processor time for different classes of resource consumers. It is inherent that class 1 may represent the already-running resource consumers and classes 2 and 3 represent resource consumers requesting to start new activities and may receive no processor time as the plan is configurable.

D. As to claims 6 and 14:

Support from the original disclosure of the parent disclosure for the claimed limitations of *“configuring the second configurable value to a value adapted to allow one or more active*

sessions from the second resource consumer group to be run while the first configurable value is set to the quiescence value.”

Please refer to all evidentiary support for claim 1, Figs. 5A-5B, Fig. 6, and col. 9, l. 40-col. 10, l. 29 of the ‘303 patent where the figures and the relevant sections of the figures disclose different priorities and resource plans for different resource consumers.

E. As to claim 8:

Support from the original disclosure of the parent disclosure for the claimed limitations of *“replacing the first resource plan with a second resource plan, the second resource plan comprising a first resource consumer group and a second resource consumer group, the second resource plan being adapted to prevent the first resource consumer group from starting new activity on the computer system while allowing the second resource consumer group to start new activity on the computer system, wherein the second resource plan comprises an active session limit that represents a limit on a number of active sessions.”*

Please refer to col. 3, ll. 10-22, col. 4, ll. 8-16 and ll. 25-29, col. 6, ll. 47-57, col. 7, ll. 1-20 and ll. 37-39, and col. 9, ll. 4-18 and also to Figs. 4-6 where the parent discloses that the first resource plan may be changed to a different resource plan to serve different purposes.

Please also refer to the evidentiary support for the claimed elements of “prevent . . . from starting new activity”, “allowing . . . to start new activity”, and “active session limit”.

F. As to claims 25, 27, and 29:

Claims 25, 27, and 29 recite similar limitations. Please refer to all evidentiary support for the claimed elements of claim 1, col. 3, ll. 40-53, and Figs. 3-6 where the parent discloses that up to a maximum of 100% of the processor time available at a given level within a plan is distributed and that certain classes may be assigned 0% of the process time and thus the active session limit must be zero.

G. As to claim 31:

Please refer to col. 10, ll. 43-48 of the '303 patent where the parent discloses a limited number of runnable requesters are kept awake and the rest are put to sleep according to the resource plan. Thus, it is inherent that the limit set in the resource plan is not to be exceeded to serve the intended purpose for these resource plans.

H. As to claims 32, 33, and 34:

Please refer to col. 10, ll. 43-48 of the '303 patent where the parent discloses a limited number of runnable requesters are kept awake and the rest are put to sleep according to the resource plan and thus the number of active sessions (resource consumers) is limited not to exceed the limit on the maximum number of active sessions.

V. CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Applicants respectfully submit that as Sitaraman does not constitute proper § 102(e) reference for at least the foregoing reasons, Sitaraman may not be combined with Jones to reject the claims under 35 U.S.C. § 103(a).

CONCLUSION

Based on the foregoing, all remaining claims are believed in condition for allowance. If the Examiner has any questions or comments regarding this amendment, please contact the undersigned at the number listed below.

The Commissioner is authorized to charge any fees due in connection with the filing of this document to Bingham McCutchen's Deposit Account No. 50-2518, referencing billing number 7010984002. The Commissioner is authorized to credit any overpayment or to charge any underpayment to Bingham McCutchen's Deposit Account No. 50-2518, referencing billing number 7010984002.

Respectfully submitted,

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